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EXAMINER

POPHAM, JEFFREY D

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,379

Applicant(s)

HAMMAN ET AL.

Examiner

Jeffrey D. Popham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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***Remarks***

Claims 1-45 are pending.

***Response to Arguments***

1. Applicant's arguments, see remarks, filed 5/2/2005, with respect to the rejection(s) of claim(s) 1-45 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection with Zach, Bradish, Backus, Folmsbee, Sako, Gimmon, Applied Cryptography, and IEEE Dictionary (in various combinations) is made in view of Schneier (U.S. Patent 5,871, 398) and Taaffe (U.S. Patent 4,747,139).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 13-15, 17, 27, 36, 37, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier (U.S. Patent 5,871,398) in view of Zach (U.S. Patent 5,954,582).

Regarding Claim 1,

Schneier discloses a system for playing a lottery-type game, comprising a play generator operable to generate a playfile without input from any player of the game, the playfile having a plurality of records; and an evaluator (CMC) (Column 9, line 35 to Column 10, line 4), but does not disclose that a record comprises a numeric value, a win generator operable to generate a winning number, or that the evaluator is operable to receive the playfile and the winning number, the evaluator operable to retrieve a record from the playfile in response to input from the player, to compare a numeric value in the retrieved record to the winning number, and to communicate a win/loss result to the player.

Zach, however, discloses that a record comprises a numeric value (Column 6, lines 7-25);

A win generator operable to generate a winning number (Column 7, lines 40-45); and

An evaluator operable to receive the playfile and the winning number, the evaluator operable to retrieve a record from the playfile in response to input from the player, to compare a numeric value in the retrieved record to the winning number, and to communicate a win/loss result to the player (Column 7, lines 32-54).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the wagering system of Zach into the remote lottery system of Schneier in order to verify that a certain

play has won at both the player and the evaluator and to confirm accurate reception of data (Zach, Column 7, line 55-65).

Regarding Claim 13,

Claim 13 is a method claim that corresponds to system claim 1 and is rejected for the same reasons.

Regarding Claim 36,

Claim 36 is an apparatus claim that corresponds to system claim 1 and is rejected for the same reasons.

Regarding Claim 41,

Claim 41 is a logic encoded media claim that corresponds to system claim 1 and is rejected for the same reasons.

Regarding Claim 2,

Zach discloses that the evaluator receives the playfile in an electronic format at an interface coupled to a network that provides an electronic communications path between the evaluator and the play generator (Column 7, lines 32-54). In the host, the playfile is reproduced by using the random number algorithm and the seed sent to the host from the player, thus reproducing the playfile.

Regarding Claim 17,

Claim 17 is a method claim that corresponds to system claim 2 and is rejected for the same reasons.

Regarding Claim 3,

Zach discloses that the evaluator receives the playfile prior to the win generator generating the winning number (Column 7, lines 32-54).

Regarding Claim 14,

Claim 14 is a method claim that corresponds to system claim 3 and is rejected for the same reasons.

Regarding Claim 27,

Claim 27 is a method claim that corresponds to system claim 3 and is rejected for the same reasons.

Regarding Claim 37,

Claim 37 is an apparatus claim that corresponds to system claim 3 and is rejected for the same reasons.

Regarding Claim 4,

Schneier discloses that the playfile represents a number of plays at a win probability (Column 9, line 35 to Column 10, line 4) and communicating a win/loss result to the player in a sufficiently small amount of time to convey a real-time play experience to a user of the player (Column 24, lines 26-28), but does not disclose that the evaluator is further operable to store the playfile prior to playing the lottery-type game.

Zach discloses that the evaluator is further operable to store the playfile prior to playing the lottery-type game (Column 7, lines 32-54).

Regarding Claim 15,

Claim 15 is a method claim that corresponds to system claim 4 and is rejected for the same reasons.

Regarding Claim 42,

Claim 42 is a logic encoded media claim that corresponds to claim 4 and is rejected for the same reasons.

Regarding Claim 5,

Schneier discloses that the play generator generate a plurality of records based on a number of plays and a win probability (Column 9, line 35 to Column 10, line 4), but does not disclose that a record is a numeric value.

Zach, however, discloses that a record is a numeric value (Column 6, lines 7-25).

3. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, further in view of Bradish (U.S. Patent 5,830,064).

Regarding Claim 6,

Zach discloses that the win generator generates the winning number based on a plurality of seeds (Column 7, lines 32-54), but not that the seeds are from public verifiable random sources.

Bradish, however, discloses that the win generator generates the winning number based on a plurality of seeds from public verifiable random sources (Column 1, lines 20-37). It would have been obvious to

one of ordinary skill in the art at the time of applicant's invention to incorporate the method of generating random numbers from Bradish into the remote lottery system of Schneier as modified by Zach in order to produce biased random numbers that are more random than those generated with a pseudo random number generator.

Regarding Claim 24,

Claim 24 is a method claim that corresponds to system claim 6 and is rejected for the same reasons.

4. Claims 7-9, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach and Bradish, further in view of Backus (U.S. Patent 5,197,736).

Regarding Claim 7,

Bradish discloses that the random sources comprise weather data or environmental noise (Column 1, lines 31-37), but Schneier as modified by Zach and Bradish does not disclose that the random sources comprise a lottery result.

Backus, however, discloses that the random sources comprise a lottery result (Column 2, line 21 to Column 3, line 15). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teachings about previous lottery results of Backus into the remote lottery system of Schneier as modified by Zach and Bradish in



order to generate the seed with respect to prior lottery results so as to prevent someone from gaining advantage over others in the lottery by analyzing prior lottery results in order to determine future winning numbers.

Regarding Claim 25,

Claim 25 is a method claim that corresponds to system claim 7 and is rejected for the same reasons.

Regarding Claim 8,

Zach disclose that the win generator is integral with the evaluator and generates the winning number based on a winning number algorithm received from the play generator, the winning number algorithm specifying a numeric calculation using the seeds to generate the winning number (Column 7, lines 32-54), but does not disclose generating the winning number based on a plurality of seeds from public, verifiable random sources, wherein the random sources comprise a plurality of published, independent lottery results.

Bradish discloses generating a winning number based on a plurality of seeds from public, verifiable random sources (Column 1, lines 20-37).

Backus discloses generating a winning number based on a plurality of seeds from public, verifiable random sources, wherein the random sources comprise a plurality of published, independent lottery results (Column 2, line 21 to Column 3, line 15).

Regarding Claim 26,

Claim 26 is a method claim that corresponds to system claim 8 and is rejected for the same reasons.

Regarding Claim 9,

Zach discloses that the play generator further comprises a verify module operable to receive the seeds and execute the winning number algorithm to verify the win/loss result (Column 7, lines 55-65).

5. Claims 10, 11, 18, 19, 21, 22, 34, 38, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, further in view of Taaffe (U.S. Patent 4,747,139) and Folmsbee (U.S. Patent 6,308,256).

Regarding Claim 10,

Schneier discloses that the playfile comprises an encrypted playfile (Column 7, line 49 to Column 8, line 9) and that records within the playfile are obtained via input from the player in the correct order, so that one record cannot be viewed before the preceding record (Column 9, lines 50-57), but does not disclose that the playfile comprises an extractor.

Taaffe, however, discloses the form of record-by-record encryption that is needed within this system (Column 9, lines 48-67). It would have been obvious to incorporate the encryption system of Taaffe into the remote lottery system of Schneier as modified by Zach in order to prevent

the unlawful use of compute software and data (Taaffe, Column 1, lines 16-29).

Taaffe does not disclose that an extractor is sent along with the playfile.

Folmsbee, however, discloses that an extractor is sent along with the encrypted playfile (Column 7, lines 49-54). It would have been obvious to incorporate the decryption system of Folmsbee into the remote lottery system of Schneier as modified by Zach and Taaffe in order to allow the evaluator to view the playfile even when it has no means for decryption itself (Column 6, line 62 to Column 7, line 2).

Regarding Claim 18,

Claim 18 is a method claim that corresponds to system claim 10 and is rejected for the same reasons.

Regarding Claim 38,

Claim 38 is an apparatus claim that corresponds to system claim 10 and is rejected for the same reasons.

Regarding Claim 43,

Claim 43 is a logic encoded media claim that corresponds to system claim 10 and is rejected for the same reasons.

Regarding Claim 11,

Schneier discloses that the playfile comprises an encrypted playfile (Column 7, line 49 to Column 8, line 9) and that records within the playfile

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are obtained via input from the player in the correct order, so that one record cannot be viewed before the preceding record (Column 9, lines 50-57).

Taaffe discloses that the evaluator is further operable to decrypt a previous record in the playfile, the decrypted previous record comprising a key (Column 9, lines 48-67); and decrypt, only a next record in the encrypted playfile using an extractor and the key (Column 9, lines 48-67).

Folmsbee discloses that the playfile comprises an extractor (Column 7, lines 49-54).

Regarding Claim 19,

Claim 19 is a method claim that is broader than system claim 11 and is rejected for the same reasons.

Regarding Claim 21,

Claim 21 is a method claim that is broader than system claim 11 and is rejected for the same reasons.

Regarding Claim 22,

Taaffe discloses that receiving a key comprises receiving the key from a remote location (Column 9, lines 49-54).

Regarding Claim 34,

Zach discloses that records are accessed in response to player input and communicating the playfile to a remote location (Column 7, lines 32-54).

Taaffe discloses that the extractor is operable to decrypt the records of the playfile one at a time (Column 9, lines 48-67).

Folmsbee discloses including an extractor in the playfile (Column 7, lines 49-54).

6. Claims 12, 23, 40, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, Taaffe, and Folmsbee, further in view of Applied Cryptography (Schneier, "Applied Cryptography", 1996, Second Edition, pp. 38-39).

Regarding Claim 12,

Schneier discloses that the playfile comprises an encrypted playfile (Column 7, line 49 to Column 8, line 9).

Zach discloses that a record comprises a numeric value (Column 6, lines 7-25).

Taaffe discloses that each record in the playfile comprises a key (Column 9, lines 48-67), decrypting a previous record in the playfile, the decrypted previous record comprising a key (Column 9, lines 48-67); decrypting only a current record in the encrypted playfile using an extractor and the key (Column 9, lines 48-67); and retrieving a next record from the decrypted current record for use in decrypting the next key (Column 9, lines 48-67).

Folmsbee discloses that the playfile comprises an extractor (Column 7, lines 49-54).

The system of Schneier as modified by Zach, Taaffe, and Folmsbee does not disclose retrieving a verification string from the current record, comparing the verification string to an authorized string, and determining that the record is authentic if the verification string matches the authorized string.

Applied Cryptography, however, discloses that each message that is encrypted (which would be each record) comprises a verification string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions");

Retrieving a verification string from the current record (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions", specifically numeral 4);

Comparing the verification string to an authorized string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions", specifically numeral 4); and

Determining that the record is authentic if the verification string matches the authorized string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions").

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the digital signature form of

authentication of Applied Cryptography into the remote lottery system of Schneier as modified by Zach, Taaffe, and Folmsbee in order to provide a reliable way to quickly authenticate each record that is transmitted within the lottery system, while allowing the signature to be separate from the document and requiring less space for storage on the receiver's side.

Regarding Claim 23,

Claim 23 is a method claim that corresponds to system claim 12 and is rejected for the same reasons.

Regarding Claim 40,

Claim 40 is an apparatus claim that corresponds to system claim 12 and is rejected for the same reasons.

Regarding Claim 45,

Claim 45 is a logic encoded media claim that corresponds to system claim 12 and is rejected for the same reasons.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, further in view of Gimmon (U.S. Patent 5,096,195).

Schneier as modified by Zach does not disclose that the steps of retrieving, comparing, and communicating are performed locally at a single evaluator site without external communication.

Gimmon, however, discloses that the steps of retrieving, comparing, and communicating are performed locally at a single evaluator site without external

communication (Column 3, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the electronic gaming apparatus of Gimmon into the remote lottery system of Schneier as modified by Zach in order to allow the system to run on a portable game unit that is not connected to a communications link.

8. Claims 20, 39, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, Taaffe, and Folmsbee, further in view of Sako (U.S. Patent 6,595,855) and IEEE Dictionary.

Regarding Claim 20,

Schneier discloses that the playfile comprises an encrypted playfile (Column 7, line 49 to Column 8, line 9).

Taaffe discloses receiving a key and decrypting, in response to the input only a next record in the encrypted playfile using an extractor and the key (Column 9, lines 48-67).

Folmsbee discloses that the playfile comprises an extractor (Column 7, lines 49-54).

Sako, however, discloses normalizing a numeric value in the record to adjust locally the win probability (Column 5, lines 57-62). It would have been obvious to incorporate the electronic lottery system of Sako into the remote lottery system of Schneier as modified by Zach, Taaffe, and Folmsbee in order to ensure that the numeric values lie within a



prescribed range (IEEE Dictionary, Page 744, normalize definition 2, mathematics of computing).

Regarding Claim 39,

Claim 39 is an apparatus claim that corresponds to method claim 20 and is rejected for the same reasons.

Regarding Claim 44,

Claim 44 is a logic encoded media claim that corresponds to method claim 20 and is rejected for the same reasons.

9. Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, Taaffe, Folmsbee, Applied Cryptography, Bradish, and Backus.

Regarding Claim 28,

Schneier discloses a method for playing a lottery-type game, comprising storing a playfile, the playfile representing a number of plays at a win probability (Column 9, line 35 to Column 10, line 4); that the playfile comprises an encrypted playfile (Column 7, line 49 to Column 8, line 9); and that records within the playfile are obtained via input from the player in the correct order, so that one record cannot be viewed before the preceding record (Column 9, lines 50-57).

Zach discloses that a record comprises a numeric value (Column 6, lines 7-25); receiving and storing the playfile in an electronic format

(Column 7, lines 32-54); receiving a winning number after storing the playfile (Column 7, lines 32-54); retrieving a numeric value from the current record in response to input from a player (Column 7, lines 32-54); comparing the numeric value to the winning number (Column 7, lines 32-54); and communicating a win/loss result to the player (Column 7, lines 32-54).

Taaffe discloses that each record of the playfile comprises a key (Column 9, lines 48-67); receiving a key (Column 9, lines 48-67); decrypting only a current record in the encrypted playfile using an extractor and the key (Column 9, lines 48-67); and retrieving a next key from the decrypted current record for use in decrypting the next record (Column 9, lines 48-67).

Folmsbee discloses that an extractor is sent along with the encrypted playfile (Column 7, lines 49-54).

Applied Cryptography discloses that each record comprises a verification string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions"); retrieving a verification string from the decrypted current record (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions", specifically numeral 4); comparing the verification string to an authorized string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions", specifically numeral 4); and

determining that the record is authentic if the verification string matches the authorized string (Pages 38-39, section "Signing Documents with Public-Key Cryptography and One-Way Hash Functions").

Bradish discloses generating a winning number based on a plurality of seeds from public, verifiable random sources (Column 1, lines 20-37).

Backus discloses that the winning number is computed using a plurality of published, independent lottery results (Column 2, line 21 to Column 3, line 15).

Regarding Claim 29,

Taaffe discloses that receiving a key comprises decrypting a previous record in the playfile, the decrypted previous record comprising a key (Column 9, lines 48-67).

Regarding Claim 30,

Taaffe discloses that receiving a key comprises receiving a key communicated from a remote location (Column 9, lines 48-67).

Regarding Claim 31,

Schneier discloses that the step of communicating a win/loss result to the player is performed in a sufficiently small amount of time to convey a real-time play experience to a user of the player (Column 24, lines 26-28).

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10. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach, Taaffe, Folmsbee, Applied Cryptography, Bradish, and Backus, further in view of Gimmon.

Gimmon discloses that the steps of retrieving, comparing, and communicating are performed locally at a single evaluator site without external communication (Column 3, lines 63-67).

11. Claims 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Zach and Taaffe.

Regarding Claim 33,

Schneier discloses a method for generating a playfile for a lottery-type game, comprising receiving a desired number of plays and a win probability and generating a record for each of the desired number of plays, each record randomly generated using the win probability (Column 9, line 35 to Column 10, line 4).

Zach discloses that each record includes a numeric value (Column 6, lines 7-25) and communicating the playfile to a remote location (Column 7, lines 32-54).

Taaffe discloses generating, for at least some of the records, a key for decrypting the next record (Column 9, lines 48-67).

Regarding Claim 35,

Taaffe discloses that at least one record in the playfile includes an indicator to receive an external key to decrypt the next record (Column 9, lines 48-67).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Matthew D. Smithers*  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*